

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:
What is claimed is:

1. (Currently amended) A display apparatus for use with a host computer system, the display apparatus comprising circuitry allowing an interlaced mode of operation and a noninterlaced mode of operation, the display apparatus comprising:

means for receiving a user input to switch a mode of operation from the interlaced mode of operation to the noninterlaced mode of operation;

a screen, said screen operable to display noninterlaced signals including visually detectable output from the host computer system when operating in the noninterlaced mode of operation and operable to display a television compatible signal when operating in the interlaced mode of operation;

a communication channel between said host computer system and said display apparatus, the communication channel for transmitting commands and information to and from said host computer system and said display apparatus;

a microprocessor for receiving and processing commands from said host computer system, said microprocessor comprising control logic for switching said display apparatus between said interlaced and noninterlaced modes of operation in response to said commands; and

a connector coupled to video capture circuitry configured, in response to receiving said user input, for use in the noninterlaced mode to convert the television compatible signal into a noninterlaced television output to be displayed in an overlay window while said visually detectable output from the host computer system is being displayed.

2. (Original) A display apparatus of claim 1, wherein said interlaced mode of operation supports at least one of a National Television System Committee (NTSC) input, a Phase Alteration by Line (PAL) input, and a Sequential a Memoire (SECAM) input.

3. (Original) A display apparatus of claim 1, wherein said noninterlaced mode of operation supports at least one of a computer graphics mode input, VGA input and SVGA input.

4. (Currently amended) A display apparatus of claim 1, wherein the microprocessor receives at least one command from said host computer system, the command suitable for controlling a television function of the display apparatus from the host computer system when said display apparatus is operating in the interlaced mode of operation, wherein the television function includes at least one of changing a channel, volume adjustment and picture adjustment, and wherein changing a channel is performed by the microprocessor and not the host computer system.
5. (Previously presented) A display apparatus of claim 1, wherein the microprocessor receives at least one command from said host computer system, the command suitable for controlling a television function of the display apparatus from the host computer system when said display apparatus is operating in the interlaced mode of operation, wherein the television function includes at least one of selecting a video source, brightness, contrast, vertical and horizontal sizing and positioning, on/off (rest/resume), refresh rate, resolution and color temperatures.
6. (Original) A display apparatus of claim 5, wherein the television function of the display apparatus is controlled from the host computer system while the display apparatus is in an interlaced mode of operation.
7. (Original) A display apparatus of claim 1, wherein said display apparatus is switched to said interlaced mode of operation, a video signal from a video controller in noninterlaced mode is not displayed by said display apparatus.
8. (Original) A display apparatus of claim 1, wherein said interlaced mode of operation supports Sequential a Memoire (SECAM) input.
9. (Original) A display apparatus of claim 1, wherein the command is a display mode change command.
10. (Original) A display apparatus of claim 9, wherein the command is sent over a serial port.

11. (Original) A display apparatus of claim 9, wherein the command is sent over a parallel port.

12. (Previously presented) A display apparatus of claim 1, wherein the overlay window is enabled as at least one of a picture-in-picture (PIP) and a picture-on-picture (POP).

13. (Currently amended) A computer system comprising:

a host computer system including:

a processor;

a memory coupled to said processor;

a video controller coupled to said processor and said memory;

means for receiving a user input to switch a mode of operation from an interlaced mode of operation to a noninterlaced mode of operation;

video capture circuitry configured, in response to receiving said user input switching to the noninterlaced mode, to convert the television compatible signal into a noninterlaced television output to be displayed in an overlay window while said visually detectable output from the host computer system is being displayed; and

a display apparatus coupled to ~~[[a]]~~the video controller of the host computer system, the display apparatus comprising circuitry allowing the interlaced mode of operation and the noninterlaced mode of operation, the display apparatus comprising:

a screen, said screen operable to display noninterlaced signals including visually detectable output from the host computer system when operating in the noninterlaced mode of operation and operable to display a television compatible signal when operating in the interlaced mode of operation;

a communication channel between said host computer system and said display apparatus, the communication channel for transmitting commands and information to and from said host computer system and said display apparatus;

a microprocessor for receiving and processing commands from said host computer system, said microprocessor comprising control logic for switching said display apparatus between said interlaced and noninterlaced modes of operation in response to said commands; and

a connector coupled to the video controller.

14. (Original) A computer system of claim 13, wherein said noninterlaced mode of operation supports at least one of computer graphics mode input, VGA input and SVGA input.

15. (Currently amended) A computer system of claim 13, wherein the microprocessor receives at least one command from said host computer system, the command suitable for controlling a television function of the display apparatus from the host computer system when said display apparatus is operating in the interlaced mode of operation, wherein the television function includes at least one of changing a channel, volume adjustment and picture adjustment, and wherein changing a channel is performed by the microprocessor and not the host computer system.

16. (Previously presented) A computer system of claim 13, wherein the microprocessor receives at least one command from said host computer system, the command suitable for controlling a television function of the display apparatus from the host computer system when said display apparatus is operating in the interlaced mode of operation, wherein the television function includes at least one of selecting a video source, brightness, contrast, vertical and horizontal sizing and positioning, on/off (rest/resume), refresh rate, resolution and color temperatures.

17. (Original) A computer system of claim 16, wherein the television function of the display apparatus is controlled from the host computer system while the display apparatus is in an interlaced mode of operation.

18. (Previously presented) A computer system of claim 13, wherein in response to said display apparatus being switched to said interlaced mode of operation, a video signal from said video controller in noninterlaced mode is not displayed by said display apparatus.

19. (Original) A computer system of claim 13, wherein the video controller receives a signal from the display apparatus.

20. (Original) A computer system of claim 19, wherein the signal from the display apparatus is a

video signal.

21. (Original) A computer system of claim 20, wherein the video signal is a composite signal.

22. (Original) A computer system of claim 20, wherein the video signal is an S-video signal.

23. (Original) A computer system of claim 13, wherein said interlaced mode of operation supports at least one of a National Television System Committee (NTSC) input, a Phase Alteration by Line (PAL) input, and a Sequential a Memoire (SECAM) input.

24. (Original) A computer system of claim 13, wherein the command is a display mode change command.

25. (Original) A computer system of claim 24, wherein the command is sent over a serial port.

26. (Original) A computer system of claim 24, wherein the command is sent over a parallel port.

27. (Original) A computer system of claim 24, wherein the command is sent over a data port.

28. (Previously presented) A computer system of claim 13, wherein the overlay window is enabled as at least one of a picture-in-picture (PIP) and a picture-on-picture (POP).

29. (Currently amended) A method of operating a computer system to control a display apparatus, the display apparatus coupled to a video controller of the computer system, said computer system and said display apparatus further coupled via a communication channel, the display apparatus comprising circuitry providing a first mode of operation which is an interlaced mode of operation and a second mode of operation which is a noninterlaced mode of operation, said method comprising the steps of:

operating the display in said first ~~display~~ mode;

receiving user input to change the ~~display~~ mode of operation from said first mode of operation to said second mode of operation;

sending a mode change command to the display apparatus in response to said user input;
in response to the mode change command, converting a television compatible interlaced signal into a converted television signal which is a noninterlaced signal;

transitioning the display apparatus from said first mode of operation to said second mode of operation; and

controlling , by a microprocessor disposed inside of the display apparatus, at least one television function of the display apparatus from the host computer system by a command received from said host computer system when said display device is in said noninterlaced mode of operation and enabling an overlay window displaying the converted television signal,

wherein the television function includes at least one of changing channel, volume adjustment, picture adjustment, selecting a video source, brightness, contrast, vertical and horizontal sizing and positioning, on/off (rest/resume), refresh rate, resolution and color temperatures.

30. (Original) A method of claim 29, wherein said interlaced mode of operation supports at least one of a National Television System Committee (NTSC) input, a Phase Alteration by Line (PAL) input, and a Sequential a Memoire (SECAM) input.

31. (Canceled)

32. (Original) A method of claim 30, wherein the mode change command is sent from the computer system via the communication channel.

33. (Previously presented) A method of claim 29, wherein the overlay window is enabled as at least one of a picture-in-picture (PIP) and a picture-on-picture (POP).

34. (Currently amended) A computer system comprising:

a host computer system including:

a processor;

a memory coupled to said processor;

a video controller coupled to said processor and said memory;

means for receiving a user input to switch a mode of operation from the interlaced mode of operation to the noninterlaced mode of operation;

video capture circuitry configured for use in the noninterlaced mode to convert, in response to receiving said user input, an interlaced television compatible signal into a noninterlaced converted television output; and

a display apparatus coupled to a video controller of the host computer system, the display apparatus comprising:

a screen, said screen operable to display visually detectable output from the host computer system when operating in the noninterlaced mode of operation and operable to also display the converted television output in an overlay window while said visually detectable output from the host computer system is being displayed in the noninterlaced mode of operation;

a communication channel between said host computer system and said display apparatus, the communication channel for transmitting commands from said host computer system to said display apparatus; and

a microprocessor for receiving and processing commands from said host computer system, said microprocessor comprising control logic for controlling a television feature of the display apparatus from the host computer system when said screen is operating in said interlaced format, and for enabling an overlay window in response to receiving said user input,

wherein the television feature includes at least one of changing a channel, volume adjustment, picture adjustment, selecting a video source, brightness, contrast, vertical and horizontal sizing and positioning, on/off (rest/resume), refresh rate, resolution and color temperatures.

35. (Original) A computer system of claim 34, wherein said interlaced mode of operation supports at least one of a National Television System Committee (NTSC) input, a Phase Alteration by Line (PAL) input, and a Sequential a Memoire (SECAM) input.

36. (Original) A computer system of claim 34, wherein the microprocessor is suitable for switching said display apparatus between said interlaced and noninterlaced modes of operation.

37. (Previously presented) A computer system of claim 34, wherein the overlay window is enabled as at least one of a picture-in-picture (PIP) and a picture-on-picture (POP).

38. (Canceled)

39. (Previously presented) A display apparatus of claim 1, wherein the display apparatus permits the utilization of computer functions on at least one of underlying screens of the overlay window.

40. (Canceled)

41. (Previously presented) A computer system of claim 13, wherein the host computer system permits the utilization of computer functions on at least one of underlying screens of the overlay window.

42. (Canceled)

43. (Previously presented) A method of claim 29, wherein the host computer system permits the utilization of computer functions on at least one of underlying screens of the overlay window.

44. (Canceled)

45. (Previously presented) A computer system of claim 34, wherein the host computer system permits the utilization of computer functions on at least one of underlying screens of the overlay window.

46. (Previously presented) A display apparatus of claim 1, wherein the screen and the microprocessor of the display apparatus are both configured within a display housing of the display apparatus.

47. (Previously presented) A display apparatus of claim 1, wherein the connector is a first connector, the display apparatus further comprising:

a second connector coupled to the video capture circuitry and configured to send the television compatible signal from the display apparatus to the video capture circuitry in the noninterlaced mode; and

a third connector coupled to the video capture circuitry and configured to receive the noninterlaced television output from the video capture circuitry.

48. (Previously presented) A computer system of claim 13, wherein the connector is a first connector, the display apparatus further comprising:

a second connector coupled to the video capture circuitry and configured to send the television compatible signal from the display apparatus to the video capture circuitry in the noninterlaced mode; and

a third connector coupled to the video capture circuitry and configured to receive the noninterlaced television output from the video capture circuitry.

49. (Previously presented) A computer system of claim 13, wherein the screen and the microprocessor of the display apparatus are both configured within a display housing of the display apparatus.

50. (Previously presented) A computer system of claim 34, wherein the display apparatus further comprises:

a first connector coupled to the video controller;

a second connector coupled to the video capture circuitry and configured to send the interlaced television compatible signal from the display apparatus to the video capture circuitry in the noninterlaced mode; and

a third connector coupled to the video capture circuitry and configured to receive the noninterlaced converted television output from the video capture circuitry.

51. (Previously presented) A computer system of claim 34, wherein the screen and the microprocessor of the display apparatus are both configured within a display housing of the display apparatus.

52. (Previously presented) A display apparatus of claim 47, wherein the display apparatus is configured to receive signals from the host computer for controlling the screen when operating in the interlaced mode of operation.

53. (Previously presented) A computer system of claim 48, wherein the display apparatus is configured to receive signals from the host computer system for controlling the screen when operating in the interlaced mode of operation.

54. (Previously presented) A method of claim 29, further comprising:
 sending signals from the computer system to control the display apparatus when operating in the interlaced mode of operation.

55. (Previously presented) A computer system of claim 34, wherein the display apparatus is configured to receive signals from the host computer system for controlling the screen when operating in the interlaced mode of operation.